

**Attorney Docket No.: FUJO 16.216 (100794-11220)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellant(s): Koji MATSUYAMA et al.  
Confirmation No.: 7540  
Serial No.: 09/336,363  
Filed: June 17, 1999  
Title: DETECTION DEVICE OF A SPREADING CODE AND A TIMING,  
...  
Examiner: Kevin Kim  
Group Art Unit: 2611

August 15, 2008

**BRIEF FOR APPELLANTS**

Board of Patent Appeals and Interferences  
Assistant Commissioner for Patents  
Washington, D.C., 20231

Sir:

A Notice of Appeal was filed on December 7, 2007 together with a Pre-Appeal Brief Request for Review. A Notice of Panel Decision from Pre-Appeal Brief Review maintaining the Appeal was issued on February 15, 2008. Appellants hereby petition for a five-month extension of time, a petition pursuant to 37 C.F.R. 1.136(a) and authorization to charge the requisite fee being enclosed. Appellants hereby appeal to the Board of Patent Appeals and Interferences from the Examiner's Decision, in the Official Action dated August 7, 2007,

finally rejecting claims 13-14 and 17-18. All requisite fees, including those for this Brief set forth in 37 C.F.R. §41.20(b)(2), may be charged to Deposit Account No. 50-1290.

(i) **Real party in interest**

The real party in interest is Fujitsu Limited, a Japanese corporation with offices at 1-1, Kamikodaka 4-chome, Nakahara-Ku, Kawasaki-shi, Kanagawa 211-8588, Japan, to which Appellant has assigned all interest in, to and under this application, by virtue of an assignment as recorded at Reel 010062, Frame 0559 of the Assignment records of the U.S. Patent and Trademark Office.

(ii) **Related appeals and interferences**

Upon information and belief, there are no other appeals or interferences, which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

(iii) **Status of claims**

The application was filed on June 17, 1999, and claims foreign priority benefits under 35 U.S.C. §119 based on Japanese Application No. 10-282258 filed on October 5, 1998. The application was filed with claims 1-12.

In a first Office Action dated June 5, 2002, claims 1, 2, 4, and 9-12 were rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 5,768,306 to Sawahashi et al.; claims 3 and 5-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawahashi et al. in view of U.S. Patent No. 5,910,948 to Shou et al.; and claims 7-8, dependent from rejected claims, were found to contain allowable subject matter.

In a response to the first Office Action, filed on September 4, 2002, Appellants

canceled claim 1 and amended claims 2-7, 9, and 12.

In a non-final Office Action dated November 1, 2002, claims 2, 4, and 7-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sawahashi et al. in view of alleged Appellants' Admitted Prior Art ("AAPA"); and claims 3 and 5-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawahashi et al. in view of AAPA, and further in view of Shou et al.

In a response to the non-final Office Action, filed on April 1, 2003, Appellants amended claims 7, 9, and 12.

In a non-final Office Action dated July 2, 2003, claims 2, 4, and 7-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,188,682 to Takagi et al. in view of Sawahashi et al.; and claims 3 and 5-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takagi et al., Sawahashi et al., and further in view of Shou et al.

In a response to the non-final Office Action, filed on November 3, 2003, Appellants amended claims 7, 9-10, and 12.

In a final Office Action dated January 27, 2004, claims 2-4 and 7-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. in view of Sawahashi et al.; and claims 5-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takagi et al., Sawahashi et al., and further in view of Shou et al.

In a response to the final Office Action, filed on April 27, 2004, Appellants canceled claims 2-12 and submitted claims 13-17. Appellants filed a Request for Continued Examination ("RCE") on May 25, 2004 to enter the claims.

In a non-final Office Action dated June 23, 2004, claim 16 was rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement; and claims

13-15 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

In a response to the non-final Office Action, filed on November 9, 2004, Appellants amended claims 13-17.

In a non-final Office Action dated May 12, 2005, claims 13-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

In a response to the non-final Office Action, filed on August 3, 2005, Appellants canceled claim 16, amended claim 15, and submitted claim 18.

In a non-final Office Action dated November 14, 2005, claim 15 was allowed; and claims 13-14 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

In a response to the non-final Office Action, filed on May 12, 2006, Appellants requested reconsideration without making any changes to the claims.

In a final Office Action dated July 25, 2006, claim 15 was allowed; and claims 13-14 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

In a response to the final Office Action, filed on October 13, 2006, Appellants amended claims 13-15 and 17-18. Appellants filed a RCE on November 22, 2006 to enter the claim amendments.

In a non-final Office Action dated February 14, 2007, claim 15 was allowed; and claims 13-14 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

In a response to the non-final Office Action, filed on May 18, 2007, Appellants amended claims 13-14 and 17-18.

In a final Office Action dated August 7, 2007, claim 15 was allowed; and claims 13-14 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Sawahashi et al.

The status of the claims as set out in the final Office Action is:

Claims allowed: 15

Claims objected to: None

Claims canceled: 1-12 and 16

Claims rejected: 13-14 and 17-18

The rejected claims are set out in the Appendix attached hereto.

The rejected claims are being appealed.

(iv) **Status of amendments**

Appellants' response filed on May 18, 2007, proffered before final rejection, has been considered. Appellants amended claims 13-14 and 17-18. Appellants did not otherwise cancel or amend any of the claims that are the subject of this appeal since the August 7, 2007 final Office Action.

(v) **Summary of claimed subject matter**

In communication performed from a base station to a mobile station, when the base station is captured at the time of initial synchronization or hand-over—where a user having a mobile terminal moves from a base station to another base station—a despreading code and a despreading timing may be detected in an asynchronous CDMA method. During a hand-over, a mobile station (or “mobile terminal”) may be required to detect a despreading code and a despreading timing that a base station is using in order to obtain the signals from each

base station that is asynchronously transmitting signals. A channel for establishing synchronization, called a perch channel, may be installed to perform the above signal detection. The spreading code of part of the perch channel or the spreading code of all the data symbols may be common to each base station or may have few candidates. Therefore, a perch channel can be captured using a predetermined despreading code.

In the case where the spreading code inherent to a base station has several candidates when the code inherent to a base station is captured after processing for a perch channel, the spreading code and the spreading timing where the maximum correlation value is obtained can be detected as a synchronizing timing by detecting the correlation value of part of common codes using a matched filter or the like and by detecting a timing at which the maximum correlation value is obtained as a synchronizing timing for all spreading codes that are candidates. When spreading codes of several candidates are correlated, a despreading process is repeated for each of the candidates. A process in the case where the spreading code of a perch channel has several candidates is equal to a process in the case where the inherent base station code has several candidates. But different from the case of a perch channel, a spreading code is different for each base station, and the number of the candidates is not limited to only a few. If it takes a long time to repeat a despreading process the number of times equal to the number of candidates when initial synchronization and clock synchronization are not obtained, a timing gradually lags because of the deflection of a local oscillator for clock timings of a base station and a mobile station. Accordingly, there is the possibility that the right correlation value of codes of all candidates cannot be obtained. Further, there is the possibility that electric power being received will change due to the effects of fading while a process is being performed, and thus correlation values cannot be properly compared.

Thus, the main objective of the claimed invention is to provide a device for removing a lag between timings and effects of fading, and for detecting a despreading code and a despreading timing necessary for communications.

In one embodiment, the present invention provides “[a] mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code [Fig. 2, page 15, line 13 to page 16, line 6 of the specification], and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination [Fig. 2, page 16, line 6 to page 17, line 7 of the specification], said mobile station comprising:

- a storage unit storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination [‘memory 2,’ Figs. 2 and 4, page 17, line 8 to page 20, line 2 and page 21, line 16 to page 23, line 14 of the specification]; and

- a control unit using same received signal having been stored in the storage unit for performing the first and second correlation determinations [Fig. 2, page 17, line 8 to page 20, line 2 of the specification; ‘controller 23,’ Fig. 4, page 21, line 16 to page 23, line 14 of the specification],” as recited in claim 13.

The present invention also provides “[a] mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and common spreading codes that are the same for a plurality of base stations by shifting a relative timing between the received signal and the common spreading codes [Fig. 2, page 15, line 13 to page 16, line 6 of the specification], and performing a second correlation determination between the

received signal and N different spreading codes that are respectively different from the common spreading codes based on a timing obtained by the first correlation determination for determining which of the N ( $N > 2$ ) spreading codes is attributable to the base station that has transmitted the received signal of which the timing has been determined by the first correlation determination [Fig. 2, page 16, line 6 to page 17, line 7 of the specification], said mobile station comprising:

a storage unit storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination ['memory 2,' Figs. 2 and 4, page 17, line 8 to page 20, line 2 and page 21, line 16 to page 23, line 14 of the specification]; and

a control unit using same received signal having been stored in the storage unit for performing the first and second correlation determinations [Fig. 2, page 17, line 8 to page 20, line 2 of the specification; 'controller 23,' Fig. 4, page 21, line 16 to page 23, line 14 of the specification],” as recited in claim 14.

The present invention also provides “[a] correlation determination method for a DS-CDMA mobile station performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code [Fig. 2, page 15, line 13 to page 16, line 6 of the specification], and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination [Fig. 2, page 16, line 6 to page 17, line 7 of the specification], said correlation determination method comprising:

storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination ['memory 2,' Figs. 2 and



4, page 17, line 8 to page 20, line 2 and page 21, line 16 to page 23, line 14 of the specification; also Figs. 5-7, page 23, line 18 to page 28, line 22 of the specification]; and using same stored received signal for performing the first and second correlation determinations [Fig. 2, page 17, line 8 to page 20, line 2 of the specification; 'controller 23,' Fig. 4, page 21, line 16 to page 23, line 14 of the specification; also Figs. 5-7, page 23, line 18 to page 28, line 22 of the specification],” as recited in claim 17.

The present invention also provides “[a] mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code [Fig. 2, page 15, line 13 to page 16, line 6 of the specification], and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination [Fig. 2, page 16, line 6 to page 17, line 7 of the specification], said mobile station comprising:

- a storage unit storing at least a portion of the received signal over a time long enough to perform both the first correlation determination and the second correlation determination ['memory 2,' Figs. 2 and 4, page 17, line 8 to page 20, line 2 and page 21, line 16 to page 23, line 14 of the specification; also Figs. 5-7, page 23, line 18 to page 28, line 22 of the specification]; and

- a control unit using same portion of the received signal having been stored in the storage unit for performing the first and second correlation determinations [Fig. 2, page 17, line 8 to page 20, line 2 of the specification; 'controller 23,' Fig. 4, page 21, line 16 to page 23, line 14 of the specification; also Figs. 5-7, page 23, line 18 to page 28, line 22 of the specification],” as recited in claim 18.

(vi) **Grounds of rejection to be reviewed on appeal**

1. Whether or not claims 13-14 and 17-18 are unpatentable under 35 U.S.C. § 103(a) for being obvious in view of alleged Appellants' Admitted Prior Art ("AAPA") and U.S. Patent No. 5,768,306 to Sawahashi et al.

(vii) **Argument**

**Issue 1: Whether or not claims 13-14 and 17-18 are unpatentable under 35 U.S.C. § 103(a) for being obvious in view of AAPA and Sawahashi et al.**

The Examiner has conceded that AAPA do not disclose the claimed storage and control unit features, and relied upon Sawahashi et al. as a combining reference that allegedly suggests these features.

Appellants respectfully submit that it would not have been obvious to one skilled in the art at the time the claimed invention was made to combine AAPA and Sawahashi et al. in the manner proposed by the Examiner absent improper hindsight.

(a) It would not have been obvious to one skilled in the art at the time the claimed invention was made to combine AAPA and Sawahashi et al. in the manner proposed by the Examiner absent improper hindsight.

The Examiner cited and relied upon Fig. 1 of the application and its corresponding description in the specification as alleged AAPA. In particular, the Examiner relied upon the description and illustration of a matched filter 1001 as alleged disclosure of the claimed "first correlation" feature, and relied upon the description and illustration of sliding correlators 1005-1 to 1005-3 as alleged disclosure of the claimed "second correlation" feature.

As described in the specification, the matched filter 1001 is involved in synchronous detection of a perch channel, the spreading code for which may or may not be common to each base station. To account for different spreading codes,

“the timing code storage circuit 1011 stores the totaled values of correlation values for the number of candidates for the spreading codes of a perch channel.” Page 8, lines 8-13 of the specification.

Once a correct despreading code at a correct despreading timing is determined, the timing code storage circuit 1011 performs synchronous detection by,

“[transmitting] a synchronizing signal, obtained by capturing a perch channel, to code generation circuits 1006-1 to 1006-3.” Page 8, lines 13-20 of the specification.

And the sliding correlators 1005-1 to 1005-3 for detecting the spreading code inherent in each base station “are configured to detect correlation values only at a predetermined timing,” which is based on the synchronizing timing obtained by the timing code storage circuit 1011. Page 9, lines 1-18 of the specification. The detection is performed with the use of an integration circuit 1008.

Thus, the alleged AAPA cited by the Examiner already accounts for maintaining correlation values for different “candidates” for spreading codes inherent in each base station with the timing code storage circuit 1011.

And,

“three code generation circuits 1006-1 to 1006-3 are provided. These circuits are configured to obtain correlation values obtained by a despreading process even at a timing that is slightly shifted so that it is before and after the synchronizing timing obtained by a timing code storage circuit 1011.” Page 9, lines 13-18 of the specification.

In other words, Fig. 1 of the application illustrates three sliding correlators 1005-1 to 1005-3 for time-shifted correlation.

Correspondingly, Sawahashi et al. only describe a technique for establishing initial synchronization for a given spreading code sequence. Sawahashi et al., as cited and relied upon by the Examiner, merely describe a sliding correlator having a memory circuit 43 at its input stage for storing a received signal, from which the stored received signal is read from

the memory circuit 43 at a frequency substantially higher than the storing rate of the received signal—which “high speed” reading from the memory circuit allegedly enables initial synchronization to be established quickly.

This cited configuration from Sawahashi et al., using memory circuit 43 was to address the “long time” it takes to establish an initial synchronization “because of time integrations”—for example, as illustrated in Fig. 3 of Sawahashi et al. Col. 3, lines 62-64 of Sawahashi et al. Fig. 3 of Sawahashi et al. illustrates a multiple dwell time synchronization system where  $N$  integral-dump circuits 16<sub>1</sub>-16<sub>N</sub> are used, each denoting dwell times  $\tau_{d1}$ - $\tau_{dN}$ , respectively.

Accordingly, Sawahashi et al. describes the period during which the received signal is kept stored in the memory 43 is being limited to the period during which the correlation is obtained by multiplying the received signal with the phase of the replica of the spreading code sequence by shifting by one chip.

For example, Sawahashi et al. describe as follows on col. 5, lines 65 to col. 6, line 1:

“Furthermore, the frequency of the write timing signal and that of the read timing signal produced by the timing generator 42 are set at  $1/TC$  and  $K/TC$ , respectively, where  $TC$  is one chip period.” (Emphasis added)

In other words, Sawahashi et al. describe the received signal being overwritten for each chip cycle ( $TC$ ), and the received signal is, thus, stored for a period corresponding to one chip cycle ( $TC$ ). Also, Sawahashi et al. describe reading out being performed  $K$  times on the basis of  $K/TC$  until the overwriting of the next received signal is performed, thereby the correlation is performed. This means that Sawahashi et al. describe the received signal being kept stored in the memory 43 during the period in which the correlation is obtained by multiplying the received signal with replica of the spread code sequence by shifting by one chip, and the overwriting after that is to be performed by the next received signal.

Indeed, in the Advisory action dated November 29, 2007, the Examiner apparently conceded that Sawahashi et al. discloses storing the received signal during a first correlation period only (Advisory action; page 2, lines 5-8). The Examiner asserted that Sawahashi et al. was only relied upon for the feature of storing the received signal while it is being correlated with a predetermined spreading code (Advisory action; page 2, lines 11-13).

Appellants respectfully submit that the Examiner employed improper hindsight in reading into the memory circuit 43 described in Sawahashi et al. a suggestion to store a received signal “over a time long enough to perform both the first correlation determination and the second correlation determination.”

As conceded by the Examiner, Sawahashi et al. describe a

“storage period of the received signal [being] limited to the period of during which the correlation (with the common spread code) is obtained.” Page 2, lines 6-8 of the Advisory Action.

Even assuming that Sawahashi et al. provide a sufficient objective reason to alter Fig. 1 of the application, the disclosure therein would have, at most, suggested a memory for storing a received signal for the duration of synchronizing a particular spreading code, or alternatively, a particular synchronizing operation.

The Examiner has not provided any motivation or suggestion from either reference, or any objective reason other than improper hindsight from the claimed invention itself, to store a received signal any longer than is necessary for a particular synchronization to span a common code synchronization and a subsequent correlation with a plurality of kinds of different codes.

Thus, the Examiner has failed to provide articulated reasoning with rational underpinning to support the legal conclusion of obviousness.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness by failing to demonstrate that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine AAPA and Sawahashi et al. in the manner proposed absent improper hindsight from the claimed invention itself

Correspondingly, even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine AAPA and Sawahashi et al., such a combination would still have, at most, suggested a memory on the input stage of a sliding correlator for a common spread code correlation, and would have failed to disclose the claimed storage unit for both the first and second correlations.

(b) The combination of AAPA and Sawahashi et al. would still have failed to disclose or suggest the claimed invention even assuming such a combination would have been obvious.

As discussed above, the Examiner has not provided any motivation or suggestion from either reference, or any objective reason other than improper hindsight from the claimed invention itself, to store a received signal any longer than is necessary for a particular synchronization to span a common code synchronization and a subsequent correlation with a plurality of kinds of different codes.

And again, the cited portions of Sawahashi et al. would have, at most, suggested a memory for storing a received signal for the duration of synchronizing a particular spreading code, or alternatively, a particular synchronizing operation. Thus, even assuming, arguendo, that it would have been obvious to one skilled in the art to combine AAPA and Sawahashi et al., such a combination would still have, at most, suggested, perhaps, a circuit with a memory circuit 43 to replace, say, sliding correlators 1005-1 to 1005-3 and integrator circuit 1008

illustrated in Fig. 1 of the application—the memory circuit 43 storing a received signal for

correlating a particular code across slightly shifted timings.

Thus, a combination of AAPA and Sawahashi et al. would still have failed to disclose or suggest,

“[a] mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code, and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination, said mobile station comprising:

a storage unit storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination; and  
a control unit using same received signal having been stored in the storage unit for performing the first and second correlation determinations.” as recited in amended claim 13.  
(Emphasis added)

Accordingly, Appellants respectfully submit that claim 13 is patentable over AAPA and Sawahashi et al., separately and in combination, for at least the foregoing reasons.

Claims 14 and 17-18 incorporate features that correspond to those of claim 13 cited above, and are, therefore, patentable over the cited references for at least the same reasons.

**CONCLUSION**

Claims 13-14 and 17-18 are not obvious in view of AAPA, and Sawahashi et al. Accordingly, Appellants respectfully submit that the Examiner erred in rejecting claims 13-14 and 17-18, and earnestly request that this Honorable Board reverse the Examiner's rejections.

Respectfully submitted,

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(viii) **Claims Appendix**

13. A mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code, and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination, said mobile station comprising:

a storage unit storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination; and

a control unit using same received signal having been stored in the storage unit for performing the first and second correlation determinations.

14. A mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and common spreading codes that are the same for a plurality of base stations by shifting a relative timing between the received signal and the common spreading codes, and performing a second correlation determination between the received signal and N different spreading codes that are respectively different from the common spreading codes based on a timing obtained by the first correlation determination for determining which of the N ( $N > 2$ ) spreading codes is attributable to the base station that has transmitted the received signal of which the timing has been determined by the first correlation determination, said mobile station comprising:

a storage unit storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination; and

a control unit using same received signal having been stored in the storage unit for performing the first and second correlation determinations.

17. A correlation determination method for a DS-CDMA mobile station performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code, and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination, said correlation determination method comprising:

storing the received signal over a time long enough to perform both the first correlation determination and the second correlation determination; and

using same stored received signal for performing the first and second correlation determinations.

18. A mobile station corresponding to DS-CDMA performing a first correlation determination between a received signal and a common spreading code with regard to a plurality of base stations by shifting a relative timing between the received signal and the common spreading code, and performing a second correlation determination between the received signal and a plurality of kinds of spreading codes that are respectively different from the common spreading code based on a timing obtained by the first correlation determination, said mobile station comprising:

a storage unit storing at least a portion of the received signal over a time long enough to perform both the first correlation determination and the second correlation determination; and

a control unit using same portion of the received signal having been stored in the storage unit for performing the first and second correlation determinations.

(ix) **Evidence Appendix**

No evidence was submitted to or entered by the Examiner during prosecution of this application.

(x) **Related Proceedings Appendix**

Upon information and belief, there are no other appeals or interferences, which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.